

Appln. No.: 09/888,173
Amendment dated October 13, 2008

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method of laying out routing traces on a virtual printed circuit board (PCB), comprising:

routing a first trace on the virtual PCB;

routing a second trace on the virtual PCB, ~~the second trace causing crosstalk~~; and
~~reducing crosstalk between the first trace and the second trace by inserting a spacer between the traces on the virtual PCB, wherein the spacer maintains one or more specified clearances between the first trace and the second trace and wherein the spacer is a virtual construct that does not appear on a corresponding real printed circuit board.~~

2. (Currently Amended) The method of claim 1, wherein inserting comprises: said reducing crosstalk between the first trace and the second trace comprises:

~~examining crosstalk rules; and~~

~~automatically inserting the spacer between the victim first trace and the aggressor second trace in accordance with the crosstalk rules predefined rules, wherein the predefined rules define the one or more clearances to be maintained between the first trace and the second trace.~~

3. (Currently Amended) The method of claim 2, wherein the crosstalk rules one or more of the one or more clearances comprises a noise thresholds that specifies a predefined measure of crosstalk, wherein a spacer is inserted if a calculated measure of crosstalk between the first trace and the second trace exceeds the predefined measure of crosstalk.

4. (Currently Amended) The method of claim 3, wherein the noise thresholds predefined measure of crosstalk comprises one or more electrical quantities. comprise at least one of physical thresholds and electrical thresholds.

5. (Currently Amended) The method of claim 2, wherein the crosstalk rules one or more of the one or more clearances comprises aggressor distance a predefined distance, wherein no

Appln. No.: 09/888,173
Amendment dated October 13, 2008

spacer is inserted if a distance between the first trace and the second trace exceeds the predefined distance.s that specify the minimum distance that a first trace must be from a second trace.

6. (Currently Amended) The method of claim 1, additionally comprising:
modifying the first trace; and
automatically modifying the spacer to maintain aone or more of the one or more
specified clearances between the first and second traces.

7 - 18 (Canceled).

19. (Currently Amended) A method of routing traces on a virtual printed circuit board (PCB), comprising:

routing a first trace on the virtual printed circuit board;
positioning a spacer adjacent to the first trace on the virtual PCB; and
routing a second trace on the virtual PCB separated from the first trace by the spacer,
wherein the spacer maintains one or more specified clearances between the first trace and the
second trace and wherein the spacer is a virtual construct that does not appear on a corresponding
real printed circuit board.

20. – 37. (Canceled)

38. (New) The method of claim 3, wherein the predefined measure of crosstalk comprises one or more spatial dimensions of the virtual PCB.

39. (New) The method of claim 2, wherein inserting additionally comprises automatically determining the spatial geometry of the spacer in accordance with the predefined rules.

40 (New) The method of claim 2, wherein inserting additionally comprises moving the first trace when one of the predefined rules is violated.